Renewable Energy Initiative Focus Group Presentation

Presented by

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REI Purpose

The purpose of the Initiative is to develop detailed public policy actions that can be taken by state government and other leaders to increase the development of cost effective renewable energy resources within the electric sector.

Why Renewable Energy?

The reasons cited by Governor Huntsman for pursuing more renewable energy are:

- **Enhance Energy Security through Resource Diversity**
- **Reduce or Avoid Greenhouse Gas Emissions**
- **Improve Air Quality**
- **Encourage Economic Development**

The REI Focus Group Concept

- Capture the views of all stakeholders
- Identify areas of consensus and disagreement
- Develop recommendations where possible in limited time available

Who Was the Focus Group?

- Representatives from a wide range of stakeholders
  - state environmental, energy, and regulatory agencies
  - public and investor-owned utilities
  - environmental and health advocacy organizations
  - renewable energy developers
  - financial and legal firms
  - academic institutions
  - other interested parties
- Open to the Public
- The Group met once a week for 2-4 hours since July 9

Work Plan

- The group completed some exercises to identify high level economic, regulatory, and technology forces that either encourage or discourage renewable energy project development within the state of Utah
- Informational Presentations-Thirteen
- Focused on Policy Options

Renewable Energy Benefits

- Diversify Utah's electric generation resource portfolio, which is currently fueled predominantly by coal and natural gas
- Help manage the risk of potential increases in and volatility of energy prices.
- Help improve energy independence and security
- Have low or reduced carbon emissions, and are not subject to future carbon regulation, thereby reducing the risk to Utah's consumers
- Improve air quality
- Provide new economic development opportunities

Barriers to RE Development

- Higher costs in some cases (by using traditional utility cost analysis) due to economies of scale, upfront capital costs, varied capacity factors, development risks, and technological or market constraints

- A lack of transmission in areas where certain renewables have a high potential, therefore acting as a hindrance to project development

Barriers to RE Development (Cont.)

- Some renewables are intermittent generators, meaning they cannot be dispatched when the power is needed by the local utility

- The overall electric system must be developed to integrate, to the extent cost effective and feasible, intermittent resources to ensure that the utility can meet customer demands when the renewable resources are not available and that system frequency, voltage, and grid reliability standards are met.

Presentations

- Review The CCSWG Energy Supply Sector subgroup Findings
- Utah's renewable energy landscape
- Renewable Portfolio Standards overview
- Comparisons of Congressional global warming bills
- Electrical "smart grid"
- Review of renewable initiatives in various western states
- Utility avoided costs

Presentations (Cont.)

- Barriers to solar energy development
- Geothermal project development hurdles
- Oregon Renewable Portfolio Standard & legislation case study
- Discussion of questions to address when considering a renewable portfolio standard
- Wyoming State Infrastructure Authority (WIA)
- Barriers to wind energy development

Policy Options

Three initiative areas were selected for more detailed discussions:

- Renewable Portfolio Standard (RPS)
- Incentives to foster renewable energy project development
- Transmission and distribution system enhancement

Renewable Portfolio Standard

While there was not an agreement regarding the need for an RPS, nor an agreement regarding the nature of the RPS, the parties agreed to:

1) examine the recently passed Oregon RPS as a way to quickly educate the group members on the details of what an RPS entails, and

2) use a “strawman,” as an initial framework only, as a way to expedite and facilitate group discussion on a possible Utah RPS.

REI Focus Group Results

Page	Reached Consensus	No Consensus
	General	
3 / 9	List of benefits of renewable energy resources	
4 / 9-10	List of barriers to renewable energy development	
10-11	List of economic and regulatory conditions, policies or programs that influence how much renewable energy will be developed	

Page	Reached Consensus	No Consensus
Renewable Portfolio Standard (RPS) for Utah – yes or no?		
13		Need for a RPS
Elements of a Utah RPS (if any)		
13		Mandatory v. voluntary targets
17		Preliminary target
19		Definition of “renewable energy” resource
20		Compliance / interim targets
21	Renewable Energy Certificates: Renewable Energy Certificates (RECs) should be used to measure compliance.	

Page	Reached Consensus	No Consensus
Elements of a Utah RPS (if any) (Cont.)		
22	Issuance of RECs: State governing body should oversee certification of RECs.	
23	Existing facilities: Project eligibility needs to be determined and needs to address resource type, vintage (i.e. commercial operation date), and geographic location criteria.	
24	REC trading: Before unbundled RECs can become a compliance mechanism, changes may need to be made to the existing regulatory framework.	

Page	Reached Consensus	No Consensus
Elements of a Utah RPS (if any) (Cont.)		
25	Recovery of costs: Prudently incurred costs should be recoverable.	
26	Cost caps: A mechanism to protect against unreasonable price increases is needed.	
27	Alternative compliance payments: Before alternative compliance payments (ACP) can become a compliance mechanism, changes may need to be made to regulatory framework.	
28		Green power programs for all utilities
29	List of additional issues that need to be addressed regarding a Utah RPS (if any)	

Incentives

- The Group agreed that current incentive programs should be expanded and that new incentives should be created.

- The group also agreed that incentives should be implemented for a continuous period of time that will be consistent with the planning horizon and implementation schedule of any proposed RPS targets

Page	Reached Consensus	No Consensus
Incentives to Foster Renewable Energy Project Development		
5 / 31	Current incentive programs should be expanded.	
5 / 31	New incentives should be created.	
5 / 31	Incentives should be implemented for a continuous period of time that will be consistent with the planning horizon and implementation schedule of any proposed RPS targets.	

Transmission

- The REI Focus Group recommended that the state fund transmission studies, possibly through the use of a state infrastructure authority.

Page	Reached Consensus	No Consensus
Enhancement of Transmission and Distribution System		
5-6/32-33	The state should fund transmission studies, possibly through the use of a state infrastructure authority.	
5-6/32-33	Transmission improvements could aided by the establishment of renewable energy development zones (REDZs)	
5-6/32-33	A funding source needs to be identified for renewable energy projects and zones and for interconnection studies.	
5-6/32-33		Timing and cost of smart grid technology

What's Next – Recommendations:

- Evaluate REDZs and how best to implement them
- Conduct rate and economic impact studies of implementing an RPS
- Perform a cost-benefit study on externalities associated with all electrical energy sources
- Assess state utility regulations to determine if changes are needed to help facilitate more renewable resources

Recommendations (Cont.)

- Study the potential capacity and benefits from distributed generation
- Evaluate the benefits of improvements to the transmission and distribution system
- Research integration of renewable energy into electrical system

Questions & Discussion